

# The World of Dominion Bridge



Dominion Bridge Company, Limited

Dear Shareholder

Attached to your copy of the  
Company's third quarter statement is a  
new publication entitled "The World of  
Dominion Bridge", which highlights  
our present organization and product  
lines. We believe this will be of interest  
to you.

R.O.B.  
R. O. B. of S. F. and co.

Chairman &  
Chief Executive Officer

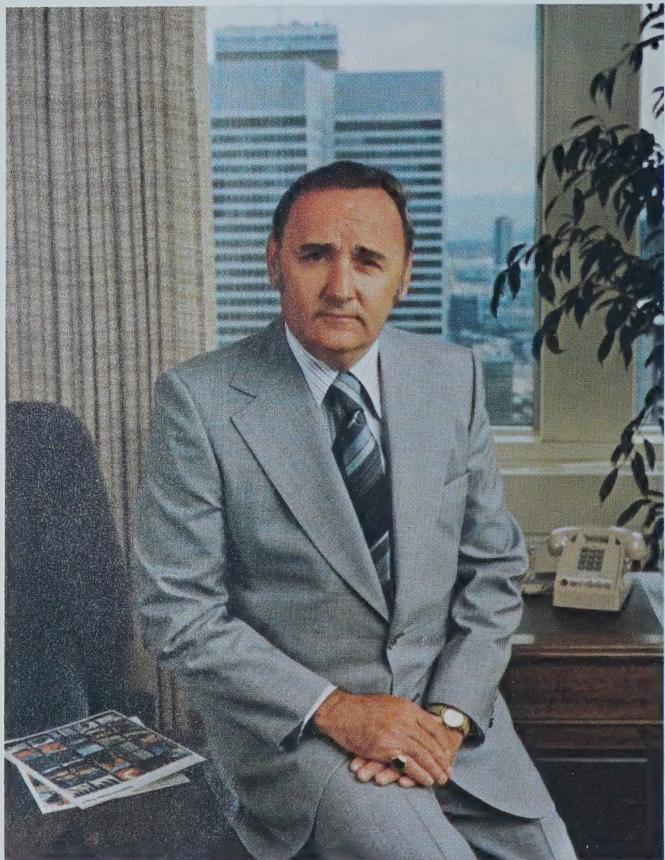
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DOMINION BRIDGE is a publicly owned corporation operating under a Canadian federal charter. Company stock trades on major Canadian exchanges. Approximately 10,000 employees now work in 33 plants in North America and in various other locations in Canada, the U.S., and the Bahamas.

# A growth-oriented international corporation



K. S. Barclay  
Chairman and Chief Executive Officer

Dominion Bridge today is a growth-oriented international corporation. Canadian by birth, the company and its subsidiaries now conduct business in a hundred countries. Indeed, operations in our home Canadian province of Québec presently account for only four percent of annual earnings.

For most of its 90-plus years in business, Dominion Bridge was involved in construction and custom steel fabrication. By the late 1960's the company had accumulated substantial assets and the core of a strong management team but had yet to exploit a rich potential for greater development.

The key that unlocked this potential was a carefully planned and executed program of acquiring other companies that:

- (a) had strong management teams;
- (b) had reputations for producing well-known, highly engineered proprietary products that could be marketed worldwide;
- (c) would provide a healthy interchange of ideas and skills with other businesses within the Dominion Bridge group; and which:
- (d) met established criteria for profitability, growth and return on investment.

This acquisition program has helped significantly to create the Dominion Bridge that exists today — a contemporary, responsive, international group of companies making effective use of its capital, physical and human resources.

Notwithstanding the above, the traditional strengths and financial integrity of Dominion Bridge have been retained and enlarged. The acquisitions have added very considerably to the amount and quality of corporate earnings. In addition, management is stronger in every respect. The result, as carefully planned, is an entity greater than the sum of its parts. Although the acquisitions of recent years have greatly expanded the company's product lines, Dominion Bridge today is by no means a conglomerate. It is and will remain an operating company devoted to manufacturing applications utilizing steel as the basic raw material.

In the future we will continue our aggressive inroads into world markets. We will maintain our careful program of acquisitions and we will continue our role as leaders in product innovation and technological advancement. We will place strong emphasis on the task of attracting new people and in meeting our financial targets with respect to earnings and return on capital. In this way we will perpetuate and add to our accomplishments.

Strong management and proven experience blend well with a healthy financial position. In the final analysis, Dominion Bridge is well equipped to sustain momentum and to maintain the growth and profitability that, in recent years, has been its hallmark.

## Highlights

Financial highlights (\$ millions)	1977 (For six months ended June 30)	1976*	1975	1974	1973	1972	1971	1970
Sales	264.8	<b>519.6</b>	459.3	370.4	278.4	236.6	234.9	196.5
Net income	18.7	<b>30.0</b>	24.4	21.7	12.3	7.6	6.2	5.6
Extraordinary income	—	—	4.3	—	—	5.9	—	1.1
Shareholders' equity	180.2	<b>168.8</b>	147.3	127.5	111.5	102.7	92.5	88.6
Long term debt	13.9	<b>30.9</b>	31.5	20.2	22.0	10.2	10.4	10.7

### Per share data (\$)\*\*

Net income	1.76	<b>2.82</b>	2.30	2.05	1.17	0.73	0.60	0.55
Extraordinary income	—	—	0.40	—	—	0.57	—	0.11
Dividends	.45	<b>.975</b>	0.85	0.54	0.38	0.34	0.25	0.25
Equity at year end	16.96	<b>15.89</b>	13.89	12.04	10.53	9.79	8.87	8.56
Number of shareholders	3,784	<b>3,688</b>	3,504	3,402	3,607	3,854	4,555	5,884
Number of employees	9,253	<b>10,313</b>	11,166	9,087	8,122	7,152	7,256	6,759

\*Restated to reflect changes in accounting policy of recording sales and profits on Canadian construction contracts to the percentage of completion basis and charging selling and administrative costs to operations as incurred.

\*\*Adjusted to reflect the two-for-one stock subdivisions in 1974 and 1976.

# The business of Dominion Bridge



J. Hatcher  
President and Chief Operating Officer

The business of Dominion Bridge is widely diversified and aimed at the growth markets... that's the way it was planned! The development of our company, both internally and through acquisition, has been structured to take advantage of our major areas of expertise — outstanding engineering ability, broad-range heavy manufacturing skills, and worldwide marketing know-how.

We are involved in most, if not all, of the rapidly expanding markets...

For the energy related market we build the world's largest cranes for use in offshore drilling rig construction, we build penstocks and spillway gates for hydraulic power and calandrias and reactor components for nuclear power.

In transportation and material handling we supply the market with tugs, barges, tunnel liners and container cranes.

For the shelter industry, we are the second largest supplier of metal buildings and, in Canada, the nation's foremost builder in structural steel and the company that erected most of that nation's landmark buildings.

Dominion Bridge is also a basic steel producer, a manufacturer of food processing machinery and for the weekender the company that makes the small inexpensive Remington chain saw.

To support 33 production facilities spread across North America is a computer network that resolves challenges in design, engineering and manufacturing, and a material laboratory specializing in, among other things, the science of welding.

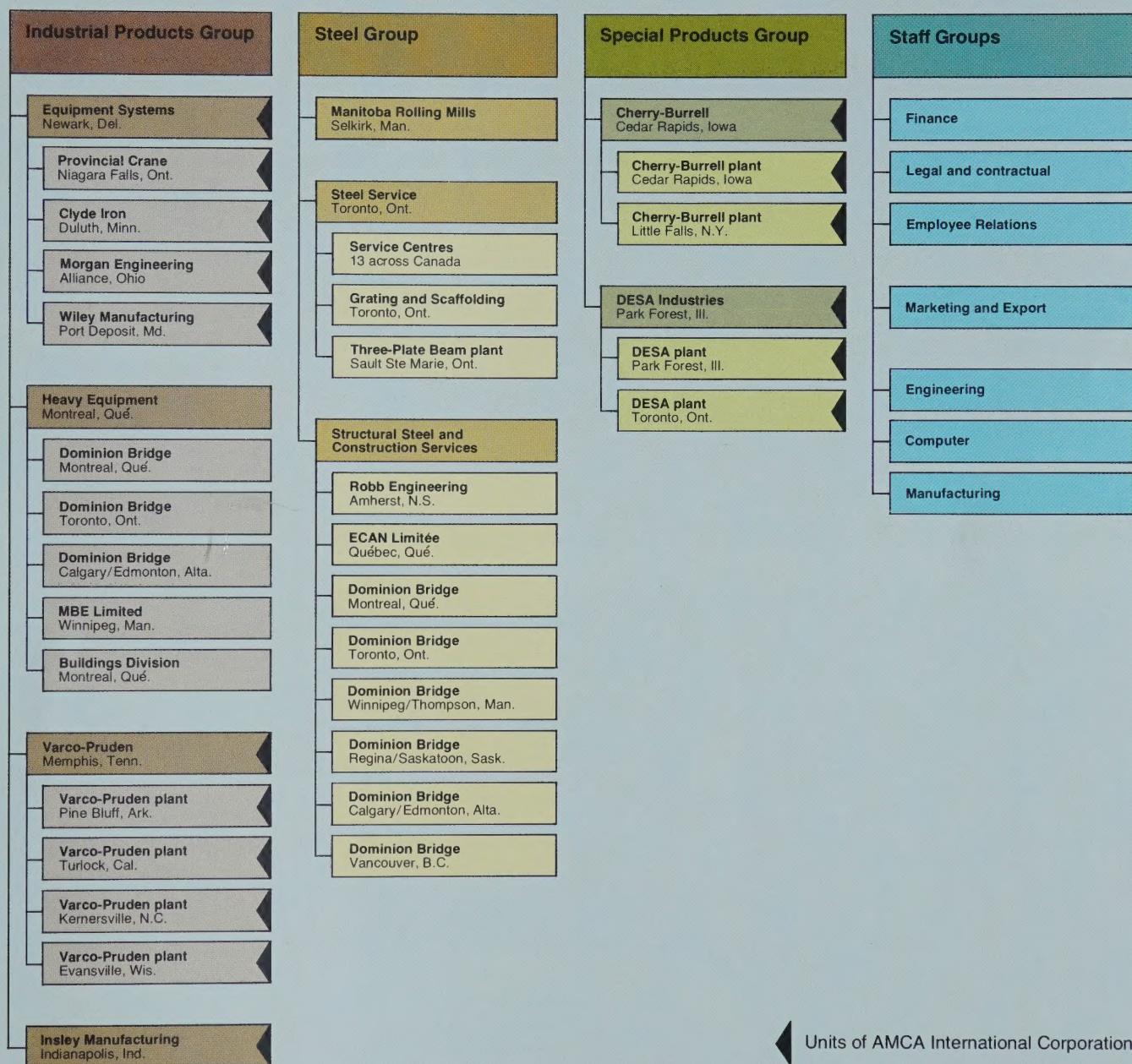
Perhaps our most important business, however, is our attitude towards the customer. We are decentralized or local in management and this puts us face to face with the customer wherever he may be. It enables us to deal with today's problems today and also to take advantage of ever present opportunities.

This book will tell you what we make and identify some of the people involved. It is about the business of Dominion Bridge.

# Plants and offices

## Dominion Bridge Company, Limited

### North American Operations



### International Operations

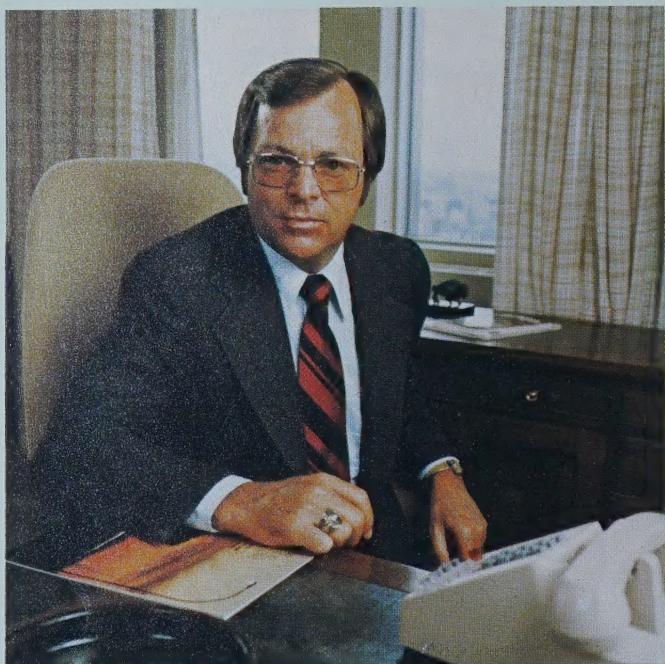
**Span Holdings Limited**  
Nassau, Bahamas



## Industrial Products Group

Equipment Systems, Heavy Equipment, Varco-Pruden, Buildings Division and Insley Manufacturing

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C. B. Rouse  
Group Vice President, Industrial Products Group

This group consists of eleven enterprises which play key roles in world energy, construction, agriculture and marine transportation.

The Equipment Systems Division, with headquarters in Newark, Delaware, includes: Provincial Crane of Niagara Falls, Ontario, Canada's largest crane manufacturer; Clyde Iron, a manufacturer of Whirley cranes, construction hoists, derricks and winches; Morgan Engineering of Alliance, Ohio, producers of overhead cranes for the steel and utility industries; and Wiley Manufacturing of Port Deposit, Maryland, a producer of barges, dump scows and tunnel tubing.

The Heavy Equipment Division, with headquarters in Montreal, consists of: the Industrial Products Division, Lachine, Québec, producers of waste heat boilers, incinerators, components for nuclear reactors and a variety of other technological work; an Alberta operation that produces platework for the petroleum, natural gas and chemical industries, as well as iron castings, and structural and reinforcing steel; MBE Limited in Winnipeg, Manitoba, producers of line hardware and engineered products; and a Buildings Division that designs and builds commercial and industrial structures, primarily in eastern Canada.

The Varco-Pruden Division of Memphis, Tennessee, designs, markets and manufactures pre-engineered metal buildings through more than 500 franchised builders in the U.S., through the Buildings Division in Canada and through Span International (see page 40) in the rest of the world. The division has four plants. They are in Pine Bluff, Arkansas; Turlock, California; Kernersville, North Carolina and Evansville, Wisconsin.

Insley Manufacturing of Indianapolis, Indiana, produces hydraulic excavators for mining, utilities and construction.

## Equipment Systems - Provincial Crane



V. S. Grater  
President  
Equipment Systems

One of the world's largest manufacturers of cranes for steel mills and industrial applications generally.



1



2



4



1. This Provincial hot metal crane handles 150 ton ladles of molten stainless steel at a major specialty mill.

2. Magnetic plate handling crane on the job in the plate shop of a large shipbuilding firm.

3. Part overhead crane. Part fork-lift truck. It's the Provincial stacker crane, a remarkably versatile unit which can lift up to 15 tons, raise the load 35 feet, rotate it 360 degrees and move it the entire length and width of the building.

4. This combination crane-conveyor for handling copper ore was designed and built by Provincial Crane. Ore is lifted and moved by conveyor through a key part of the refining process. All equipment was designed to operate smoothly in sub-zero temperatures.

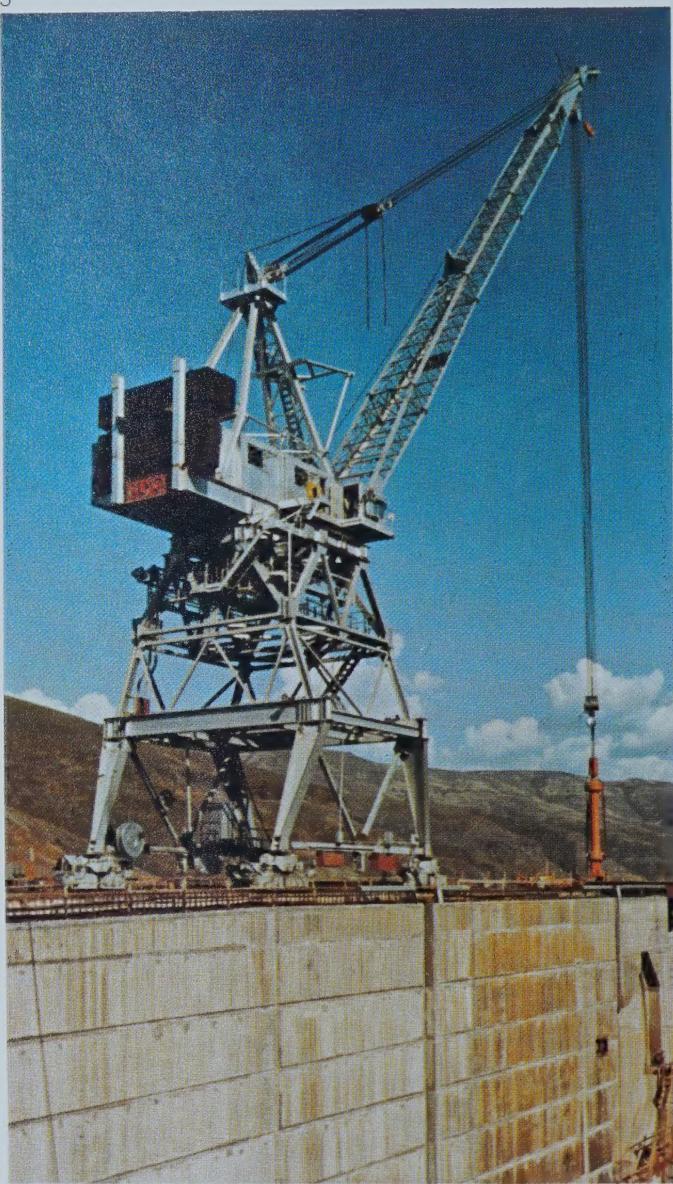
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## Equipment Systems - Clyde Iron

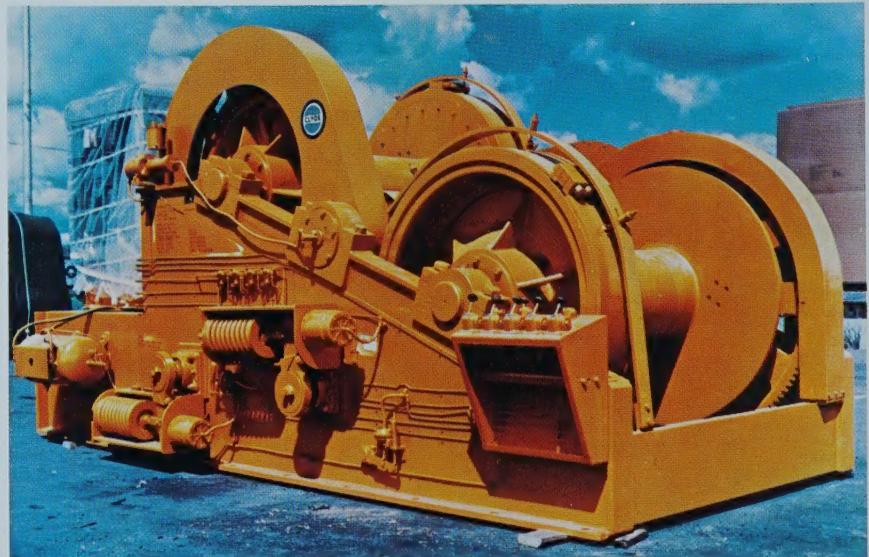
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5. Clyde Whirley cranes are particularly well suited to handle a variety of lifting chores on major construction sites such as this hydro power project.

6. Clyde 1600/2000 ton capacity crane being prepared for use in the North Sea oil fields by a French contractor.

7. Diesel powered anchor pulling winch ready to be shipped out from Clyde Iron.

## Equipment Systems - Morgan Engineering



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8. Slag pot transfer car made by Morgan Engineering for a steel plant.

9. A custom designed Morgan steel mill crane hoists 20 ton ingots from soaking pits and transfers them to rolling mills.

10. A shipboard crane for cargo containers on a transport vessel.

11. This giant ladle rotator, capable of carrying two 350 ton ladles, was designed and built by Morgan Engineering in conjunction with a major steel producer.

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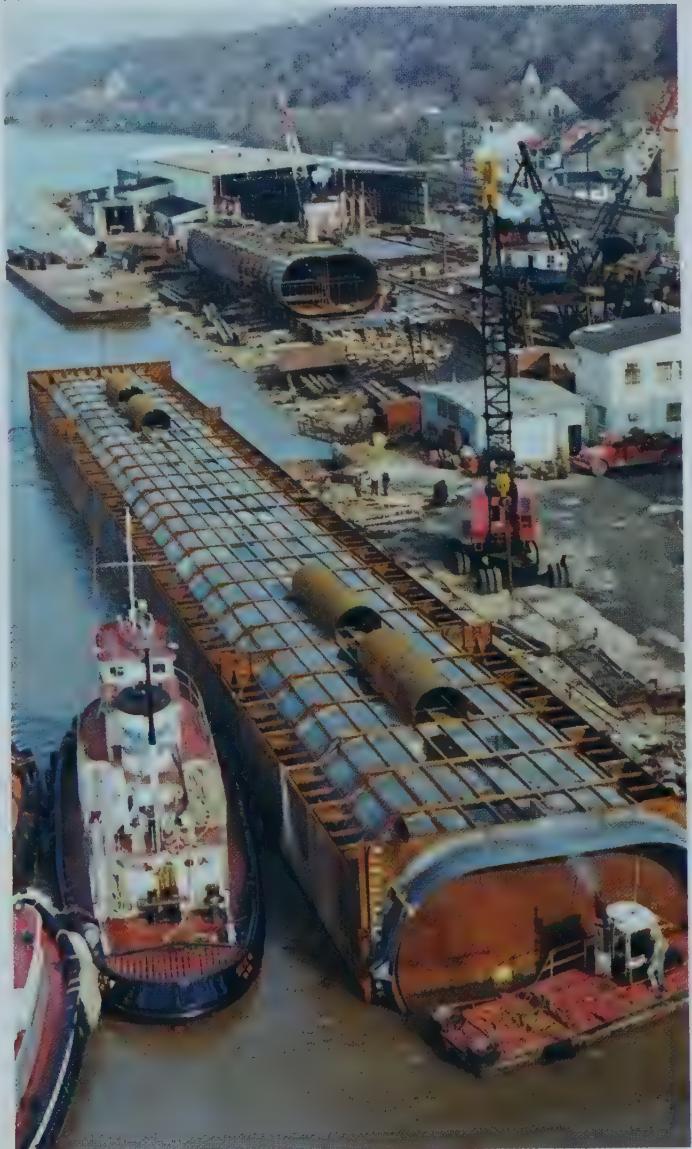


12. Her name is Big Bill, a 5,000 hp, 128 foot long ocean going tug. Bill is one of many larger vessels produced at the Wiley yards.

13. Standard 2000 cubic yard Wiley clamshell type, bottom dump barge. The barge is split longitudinally with opening and closing controlled by hydraulic rams.

14. One of three steel tubes fabricated by Wiley for an underwater rapid rail twin transit tunnel. Each section is 340 feet long, 21½ feet high and 37½ feet wide.

14



## Heavy Equipment



J. R. Irwin  
Vice President  
Heavy Equipment

Major suppliers of high technology equipment related to the energy field.

15



16



15. Nuclear reactor core designed by Atomic Energy of Canada Limited and built by Dominion Bridge for the Gentilly 2 Generating Station of Hydro-Québec.

16. Main process towers for the LaPrade Heavy Water Plant under construction near Gentilly, Québec are among the largest ever built. Plate material for the vessels was formed at the Dominion Bridge plant in Lachine and assembled on site.

17. Dominion Bridge produced these steel feeder tubes for the nuclear reactor at the Bruce Generating Station in Ontario.



17

## Heavy Equipment

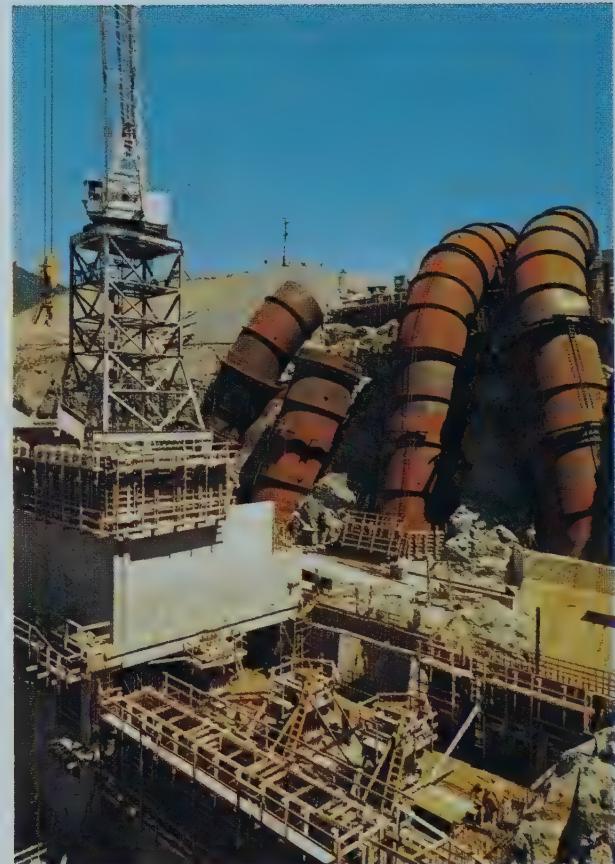
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18. Shown being pre-assembled at the Dominion Bridge plant in Montreal is one of eight spiral cases for the Manicouagan power project of Hydro-Québec. Overall diameter is 60 feet.

20. Penstocks scale the crest of a 200 foot embankment of the Kootenay Canal in British Columbia. Parts were field fabricated and erected by Dominion Bridge, Vancouver.

19. Diversion gates for the Long Spruce Generating Station in northern Manitoba, designed, built and installed by Dominion Bridge.

## Heavy Equipment

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23



21. The Alberta plant of the Heavy Equipment Division built this 135 ton steel vessel for a petrochemical company in western Canada.

22. This pedestal spheroid design provides an efficient and attractive tower for the people of Steinbach, Manitoba. It holds half a million gallons. For smaller capacities a true sphere design is available.

23. This 37 foot diameter cryogenic liquid oxygen vessel was built and installed by MBE Limited for a firm in Manitoba.

24. This huge tank, one of two made for a fertilizer company in Alberta, was built by MBE Limited and the Winnipeg branch of Dominion Bridge.

## Heavy Equipment

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25. Lectromelt furnace made in Canada under license by Dominion Bridge.

26. This ladle transfer car for a steel plant in eastern Canada was built in the Dominion Bridge plant in Lachine.

27. Two huge container cranes at work on Canada's west coast. They were designed by Paceco of California and built by Dominion Bridge.

28. This huge shiploader loads 100 tons of ore per minute. Part of the conveyor system is seen in the background. It can travel along dockside a distance of 870 feet. The boom pivots to suit deck elevations.

## Heavy Equipment



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29. This waste heat boiler for the metal refining industry was built by Dominion Bridge in Montreal.

30. The telephone and power companies of Canada are among our largest customers, though many of our products now sell throughout North and South America. To stand up against years of exposure to climatic extremes, all MBE line hardware is galvanized in our own shop.

31. This bottom-dumping mine car was designed for a mine in Thompson, Manitoba. It holds 141 cubic feet and unloads itself when an unlatching device is triggered. This car was an MBE creation from drawings to delivery.

32. A huge MBE truck scale. It was designed primarily for grain handling but has since proved valuable to other industries.

## Varco-Pruden



R. C. Kelley  
President  
Varco-Pruden

Varco-Pruden is rapidly expanding in a fast growing industry and is currently number two in the world in the manufacture of pre-engineered metal buildings for non residential use.

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33. A four foot mansard facade, wall length strip window and a brick and panel office provide attractive headquarters for Moody & Associates of Pennsylvania.

34. A good-looking plant and office building for Certain-Tee Products, a Maryland manufacturer of plastics.

35. This 16,500 square foot structure, constructed for Airborne Freight in Seattle, Washington, is used primarily for forwarding freight. It features a two story office with adjacent warehouse. This "Metal Building of the Year" award winner is located at Sea-Tac International Airport.



36



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36. This 76,800 square foot Metal Building Dealers Association award winner, Olympia Vocational Technical Institute at Olympia, Washington, is illustrative of the dimensional flexibility of the Varco-Pruden building system.

37. The dimensional flexibility of Varco-Pruden building systems proved useful in this Wilmington, North Carolina school gymnasium.

38. Another "Metal Building of the Year" award winner, this building houses an insurance agency in Gainesville, Florida. The structure earned honors for the Varco-Pruden builder as well as the architect of the project.

## Buildings Division

In addition to the pre-engineered facilities shown on the previous pages, Dominion Bridge offers customers a complete turnkey package in custom construction of industrial plants. The Buildings Division is equipped to seek out locations, conduct feasibility studies, assist in arranging for capital, design the structure, build and install equipment and follow through on interior finishing and landscaping. By serving as a total contractor, the Buildings Division is usually able to work to tighter construction schedules, and save its customers money by taking advantage of the company's tremendous buying power and passing those benefits along.

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39 to 41. Three views of a typical turnkey project by the Buildings Division. It has 60,000 square feet of office, and 65,000 square feet of storage and manufacturing. (39) shows the office area in the foreground, (40) shows the main lobby, (41) is the general office area.

42. An office and warehouse building at Dorval, Québec. The two storey office area covers 70,000 square feet, and there's 150,000 square feet of warehouse

42





R. E. Arceci  
President and  
General Manager  
Insley Manufacturing

Key supplier of hydraulic excavators to the construction, pipeline and utility industries.

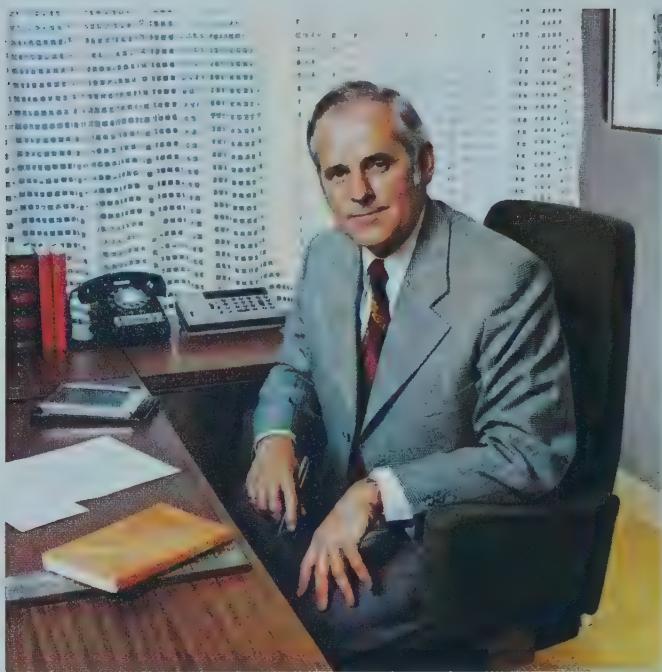
**43.** The newest hydraulic excavator of the Insley line weighs 115,000 lbs. and is equipped with a three cubic yard bucket.

**44.** Over 50 years of experience has given Insley a complete line of crawler backhoes.



# Steel Group

Manitoba Rolling Mills, Steel Service, Structural Steel and Construction Services



J. B. Phelan  
Group Vice President, Steel Group

This group manufactures, distributes and builds in steel. Its Manitoba Rolling Mills Division is a modern mini-mill with an annual capacity of 200,000 tons. The mill converts scrap into a wide range of steel products that call for more than 100 material specifications and 450 different shapes.

The Steel Service Division has thirteen centres across Canada to make it one of the largest distributors of steel in Canada. These centres maintain a full inventory of rolled steel products, tubing, cold finished bars, quenched and tempered plate, expanded metal and floor grating. Each facility is equipped to handle custom sizing and shaping.

The group's Structural Steel Division builds pressure vessels and towers for communications and power lines. It also produces general platework, open web joists, reinforcing steel and has an annual capacity of 150,000 tons of steel for bridges and buildings. This division is represented in eleven Canadian cities. Each location offers a broad range of services in engineering and construction, including: machinery installation, millwrighting, pipefitting, equipment rental and erection. Customers of these services benefit considerably from Dominion Bridge corporate resources. These range from computer analysis to special assistance in design to the development of new techniques in welding.

## Manitoba Rolling Mills

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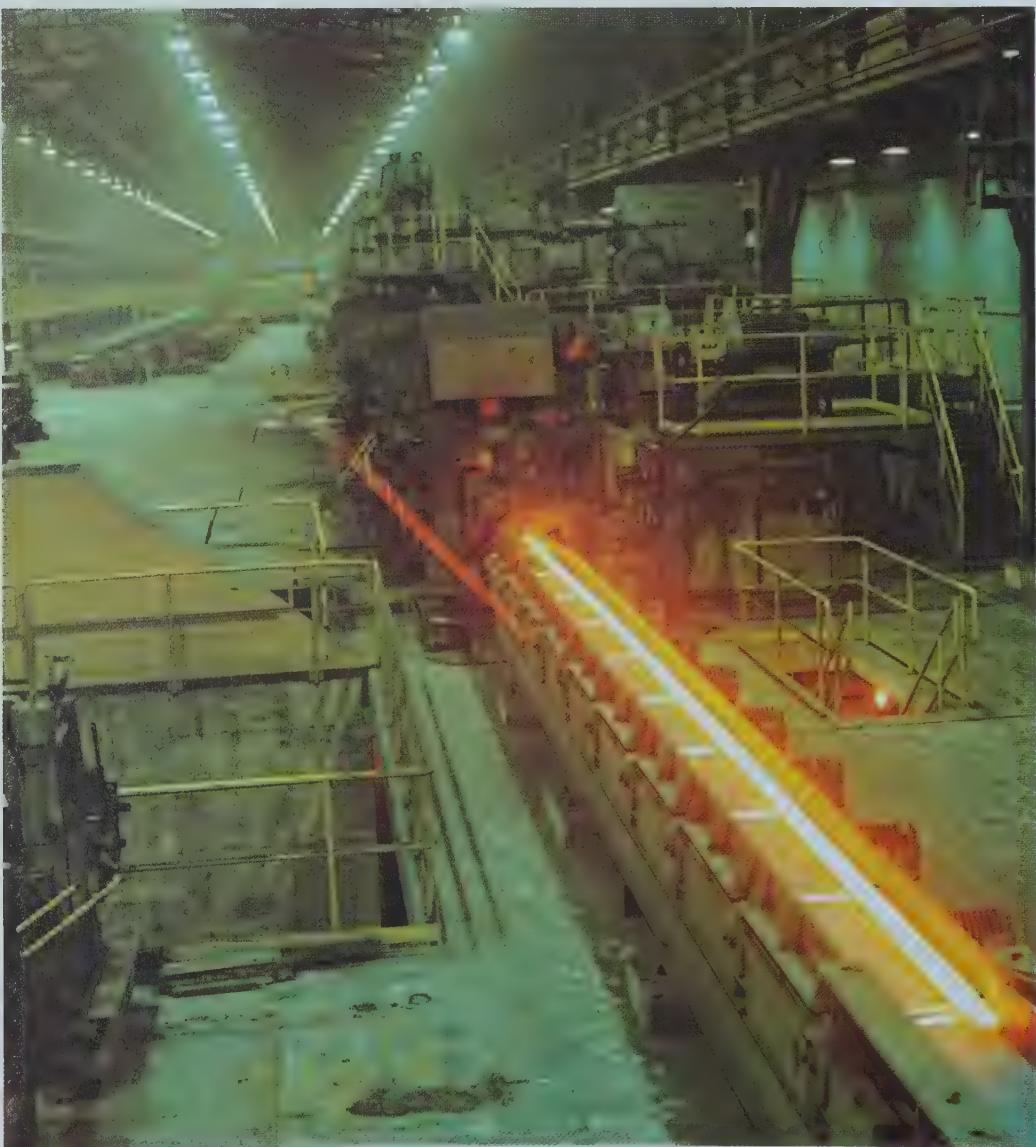


J. S. Campbell  
Vice President and  
General Manager  
Manitoba Rolling Mills



One of the most modern mills  
of its kind in North America.  
Produces a wide range of  
merchant bars and small  
structurals for Dominion  
Bridge and other customers.

46



45. The control room of the new  
Manitoba Rolling Mills plant in  
Selkirk, Manitoba.

46. Rolled product emerging  
from the Manitoba Rolling Mills  
finishing stand.



J. A. Reekie  
Vice President and  
General Manager  
Steel Service

One of the largest distributors of steel in Canada and major outlet for steel produced by Manitoba Rolling Mills.

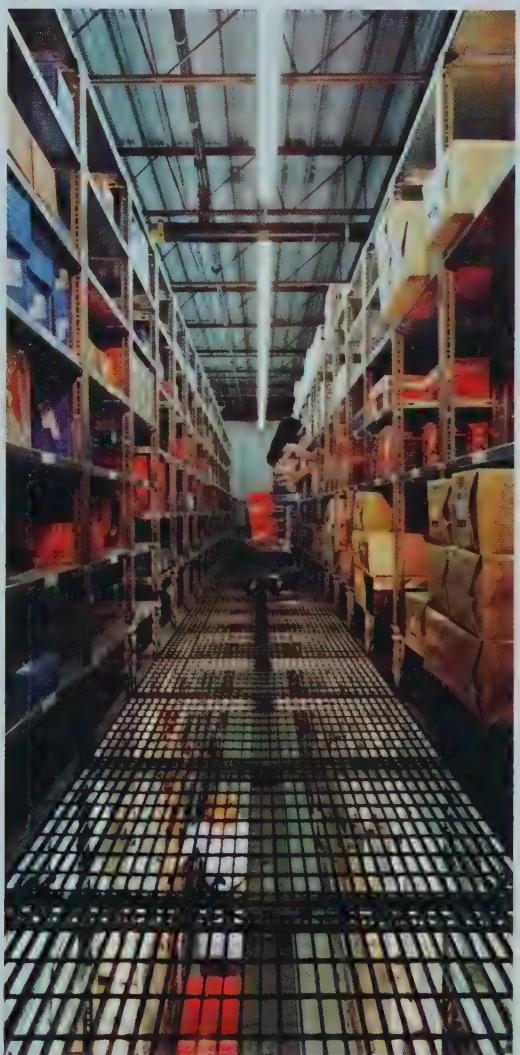
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47. A CM100 tape-driven burning machine in an Ontario Steel Service Centre. It shaped out the eleven foot diameter gear blank shown here.

48. Special machinery produces three-plate beams in Sault Ste. Marie, Ontario.

49. Dominion Bridge welded floor grating is manufactured in Toronto and shipped throughout Canada. It's seen here with metal shelving in a mezzanine floor installation of a large hardware warehouse.

## Structural Steel



K. R. Ebborn  
Vice President  
Structural Steel

The largest structural steel fabricator in Canada with nine plants across the country. Founded in 1882, it has earned world renown.



50. The south tower of the Oxford Square development in Calgary, Alberta, nears completion. Steelwork for the north tower was topped off earlier. In addition to the two office towers, the complex includes a three-level retail podium and the 2½ acre glassed-in park in foreground.

## Structural Steel

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53



51. Ten and a half thousand tons of steel and platework was provided and erected by Dominion Bridge for this pelletizing plant in Québec.

52. A combination of structural steel, platework and field services was required on this blast furnace installation.

53. One of the 298 transmission towers made in the Winnipeg shops to specifications of B.C. Hydro.

54. The Corvette River Bridge, part of the route to the James Bay hydroelectric project in northern Québec.

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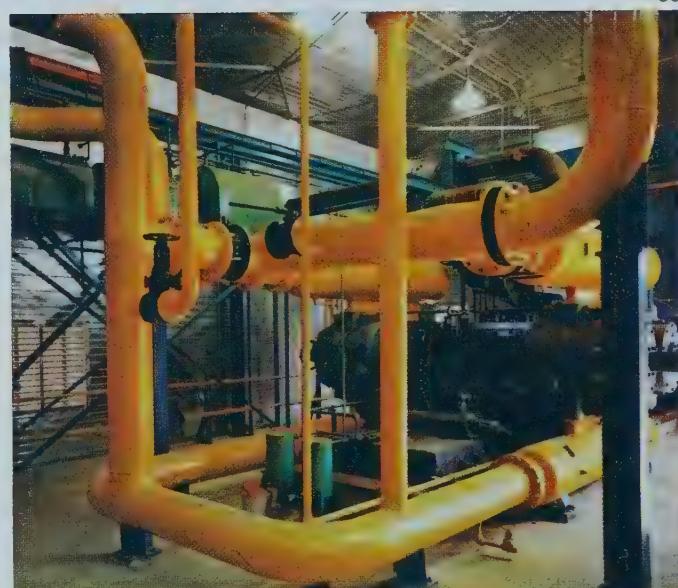
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55. A rotor is lowered into place for one of two new 20,500 horsepower generators in the underground powerhouse of the Aishihik power project in the Yukon.

56. The skeleton of Olympic Stadium rates as one of the most spectacular balancing acts that Montreal has seen. Here Dominion Bridge crews manoeuvre the final unit of the technical ring into position.

57. Placing reinforcing steel for construction in concrete. Construction services include design, cutting, bending and tagging as well as placement.

58. Interior of a pipeline pumping station. Dominion Bridge constructed the building and installed all operating equipment, including the piping.

## Special Products Group

### Cherry-Burrell and DESA Industries

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R. H. Elman  
Group Vice President, Special Products Group

This group consists of two divisions: Cherry-Burrell and DESA Industries. Both play major roles in their respective fields; both enjoy significant worldwide sales.

Cherry-Burrell has plants in Cedar Rapids, Iowa and Little Falls, New York, where it makes processing and packaging equipment for the dairy, beverage, chemical, cosmetic, pharmaceutical and other industries. Cherry-Burrell is one of the world's largest manufacturers of carton filling equipment for dairy and food products. It also produces fittings and valves, heat exchangers, homogenizers and various tanks and pumps. With this diverse product range, Cherry-Burrell can often provide customers with a complete custom-planned processing system.

DESA Industries has operations in Park Forest, Illinois and Toronto, Ontario. It manufactures and sells Remington electric and gasoline chain saws and other power tools for home and industry. DESA is a major force within the chain saw market in Europe and North America. Its Remington "Limb N' Trim" is the largest selling electric chain saw in the world.

Other DESA products include concrete vibrators, power trowels, powder-actuated fastening tools and masonry and concrete saws. These products are sold the world over.



G. J. Remus  
President  
Cherry-Burrell

A major world supplier of processing and packaging machinery for food, beverages, cosmetics and pharmaceuticals. Has an enviable growth record in recent years.



59

59. Because they are used primarily by dairies, Cherry-Burrell's carton fillers must comply with rigid sanitation laws. They are made of stainless steel and carefully engineered to assure product purity. Here we see part of a dairy installation in Minnesota.

60. Stainless steel processing vessels by Cherry-Burrell are used for heating, cooling and mixing products where corrosion resistance or product purity are essential. This installation is part of a pharmaceutical plant.



60

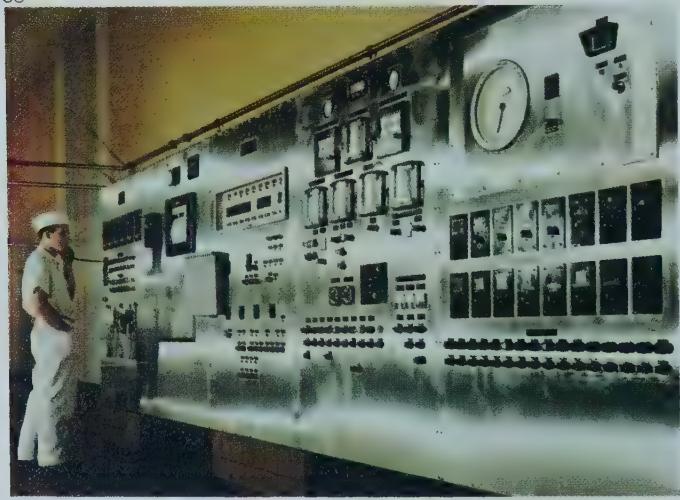
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63



61. Storage tanks are available with capacities of up to 30,000 gallons. Seen here is a battery of horizontal tanks together with automatic valves and fittings, Flexflo centrifugal pumps and a processing vessel.

63. In automated product processing plants, Cherry-Burrell control panels are vital to smooth operations.

62. Cherry-Burrell is a leader in aseptic processing technology. This installation shows an homogenizer (center), a plate heat exchanger, pumps, assorted fittings and valves.

64. As one of America's largest manufacturers of stainless steel fittings and valves, Cherry-Burrell produces a wide range of related products.

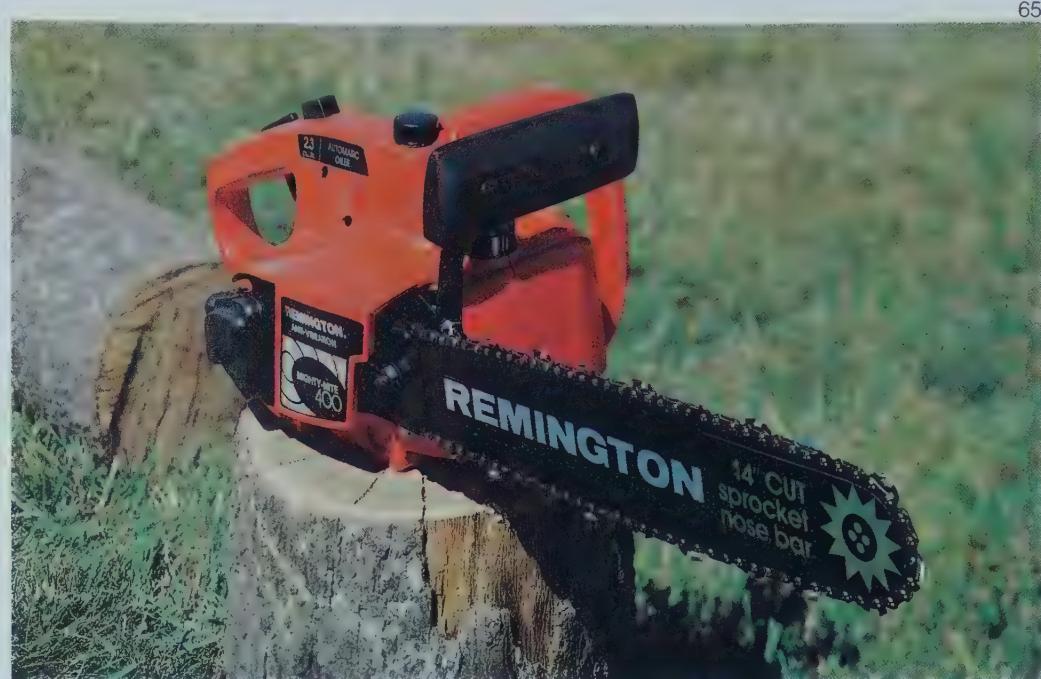
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D. R. Axtell  
President  
DESA Industries

Major international supplier of electric and gasoline driven chain saws and miscellaneous construction equipment.



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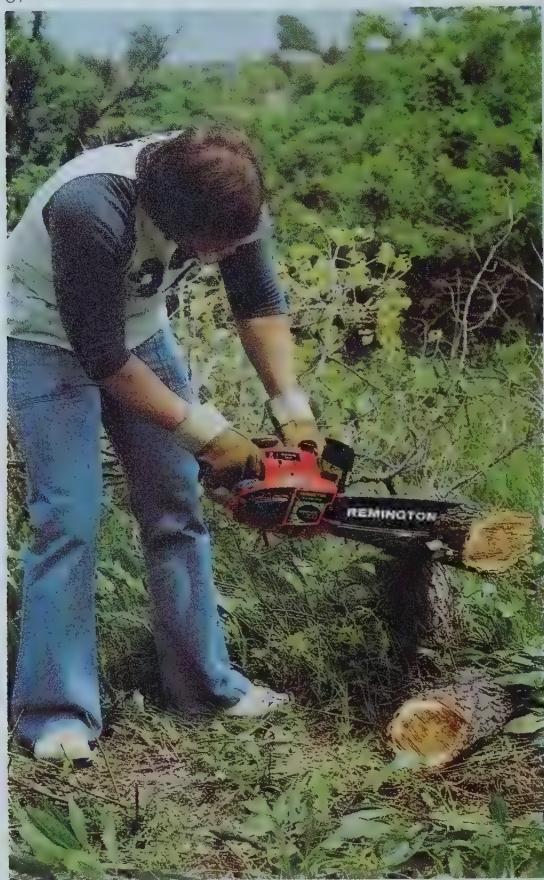


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65. One of the largest of the five models of Remington Mighty Mite gasoline saws. These saws, introduced by DESA Industries, offer consumers the finest chain saw features available.

66. The popular Remington Limb N' Trim 12, one of four models in this line of low priced, lightweight electric chain saws. DESA Industries is now the world's largest manufacturer of electric chain saws.

67



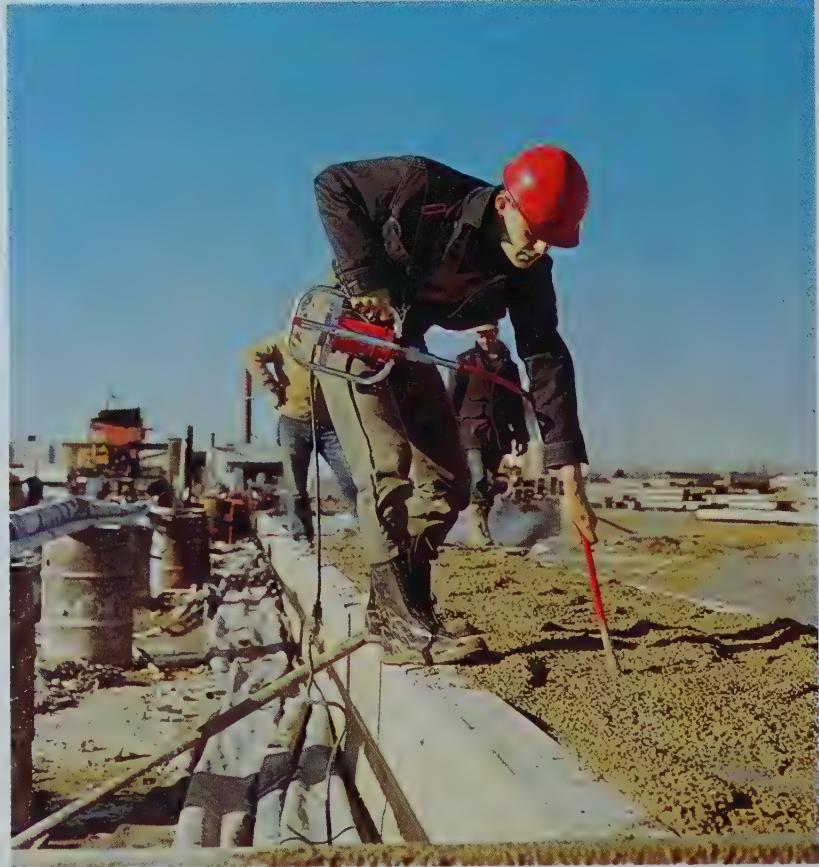
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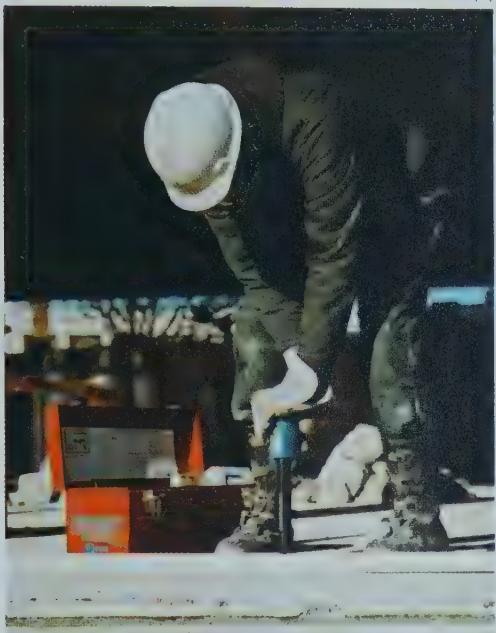
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**67.** Remington Mighty Mite gasoline chain saw. Features such as chain brake, an anti-vibration system, automatic oiling, trigger lock and a spark-arresting muffler put these saws years ahead of competition.

**68.** Remington chain saws are private-branded for Montgomery Ward. A complete line of electric and gasoline saws are sold in Montgomery Ward stores throughout the United States.

**69.** DESA Industries' new "Do-It-Yourself" Remington power hammer is the only tool of its kind on the market. This lightweight, low-cost tool enables homeowners to make fastenings into concrete, cement block or steel.

**70.** Remington electric, gasoline and air powered vibrators are designed to handle concrete consolidation when building columns, walls, decks, prestressed piles or beams on construction sites the world over.

**71.** The slim, trim Remington 473 stud driver adapts to a wide number of uses in the building trades. It handles a complete range of powder-actuated fasteners from half an inch to three inches long to provide easy fastenings into masonry or steel.

**72.** Ten models of Champion power trowels manufactured by DESA Industries offer contractors a wide choice of sizes for smoother, faster finishing of concrete. One Champion trowel does the work of six men hand-finishing a concrete slab.

**73.** This portable Champion TAK-A-BOUT masonry saw is designed for quick and easy moving around on construction job sites. These saws, equipped with a diamond blade, are used by masonry contractors to cut brick, cement block or stone.

**74.** Champion concrete saws are designed for speedy cutting work on streets, sidewalks or concrete slabs. DESA Industries manufactures 15 different models for repair and construction projects throughout the world.

## Staff Groups

### Financial, legal and contractual, employee relations



Left to right:

F. J. Stevenson  
Senior Vice President, Finance

R. J. A. Fricker  
Vice Chairman

W. R. Holland  
Senior Vice President, Administration

This group consists of a small mobile team of specialists who serve general corporate needs and the operating divisions in specialized areas such as finance, law, insurance and industrial relations.

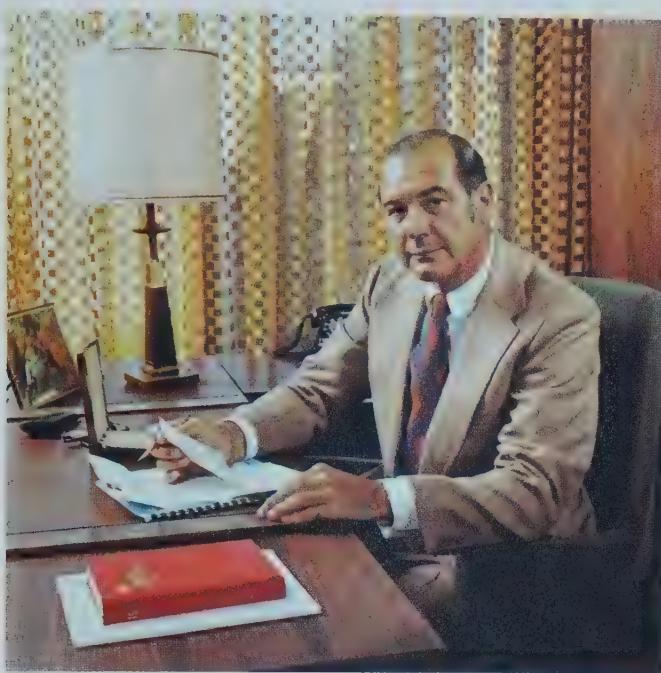
Strategically located to serve North American operations from corporate offices in Montreal, Québec; and Hanover, New Hampshire; the group reflects the general philosophy of the company to build management bench strength in the various disciplines of the business within the operating divisions and to supplement their efforts with the specialists at the corporate level. In areas where it is not practical to maintain expertise at the division level, such as legal services, it is provided on a whole company basis by the corporate staff.

Activities divide into four broad categories: assisting management in monitoring the diverse operations of the company; providing specialized advice, consultation and assistance throughout the operating divisions; filling needs which are peculiar to the company as a whole or which overlap the divisions; and assisting with corporate growth and development.

Illustrative of the foregoing is the assistance offered by corporate Industrial Relations personnel to some 33 plants throughout North America. All labor negotiations, while conducted on a local basis by operating personnel, are monitored by corporate specialists to ensure that certain fundamental principles are sustained. The corporate group also provides liaison and assistance in such matters as human resource planning, salary administration and key personnel placement.

Central to the company's success has been its emphasis upon strong financial planning and control and the on-going development of financial tools that supply operating management with the basis for decisions. Financial personnel at the corporate level work closely with the operating divisions in the formulation of annual budgets, working capital standards and deal with significant financial problems or opportunities.

## Corporate marketing and export



M. J. Ucci  
Senior Vice President, Corporate Marketing

A classic example of synergy at work. This group augments the various marketing groups within the Dominion Bridge family to provide customers with what is almost a "one-stop" corporate shopping service. A client in need of several products or services from a variety of our divisions can be capably accommodated through this one convenient source. Many of these "package deals" are multi-million dollar undertakings. We offer all the benefits of dealing with a "local" firm, while at the same time offering the expertise and associations that are so vital to international operations.

75. Zircalloy calandria for a Taiwan reactor. In a special clean room, welding continues on a calandria that will be part of a 40,000 kilowatt research nuclear reactor in Taiwan.

76. A barge-mounted Clyde Whirley crane making a 430 ton lift.

75



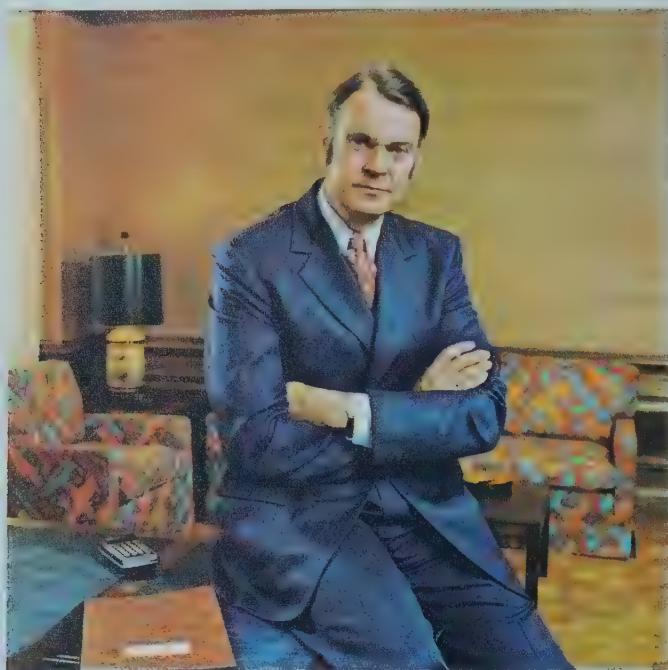
76



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## Staff Groups

### Engineering, computer and manufacturing services



R. E. Chamberlain  
Senior Vice President, Engineering and Manufacturing

The basic concept is to strengthen the various components in our family of companies by assisting them in engineering, product design, research and development, manufacturing, and quality control. With the extremely sophisticated centralized laboratory facilities at their disposal, it's not surprising therefore that several divisions have led the way in the development of new industrial technology.

A centralized computer network gives each division access to a sophisticated 24 hour-a-day company operated control centre. This has proved invaluable in operations ranging from building design to stress analysis for construction cranes and pressure vessels.

In product development our synergistic approach to business pays big dividends. Frequently engineers and designers in one division are able to benefit from the experiences of their associates in another member company. The Staff Groups coordinate this sharing of expertise.

To our customers, the achievements of this group result in a more advanced, more accurate and often more economical solution to the job at hand.

## Engineering Services



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77. An interchange of new ideas helps each part of Dominion Bridge to learn from the experience of associated groups. Here a process specialist instructs shop personnel in the welding of tubes for large boiler installations.

78. All groups within the Dominion Bridge family benefit from the facilities of our Research and Development Centre. Here a weld sample receives microscopic scrutiny.

79. What are the effects of restraint on weld joint cracking and lamellar tearing? Answers are unveiled in tests made with this 75 ton rigid restraint machine, designed and built by Engineering Services personnel.

80. Improved paint spraying techniques are developed by a corporate staff man in Montreal.

## Engineering Services

81



82



81. Wind tunnel tests were conducted on model of proposed heavy water tower installation to prove design. Photograph was taken at National Research Council laboratories in Ottawa.

82. This test frame, designed and fabricated at Dominion Bridge in Lachine, allows a spherical joint for a double-layer space frame to be tested. The variable combination of loads (tension and compression) in each member can add up to 150 tons.

83



83. Our involvement in sophisticated nuclear components often calls for new ideas in production. A special orbital welding technique has been developed by Engineering Services personnel for nuclear core fabrication.

## Computer Services

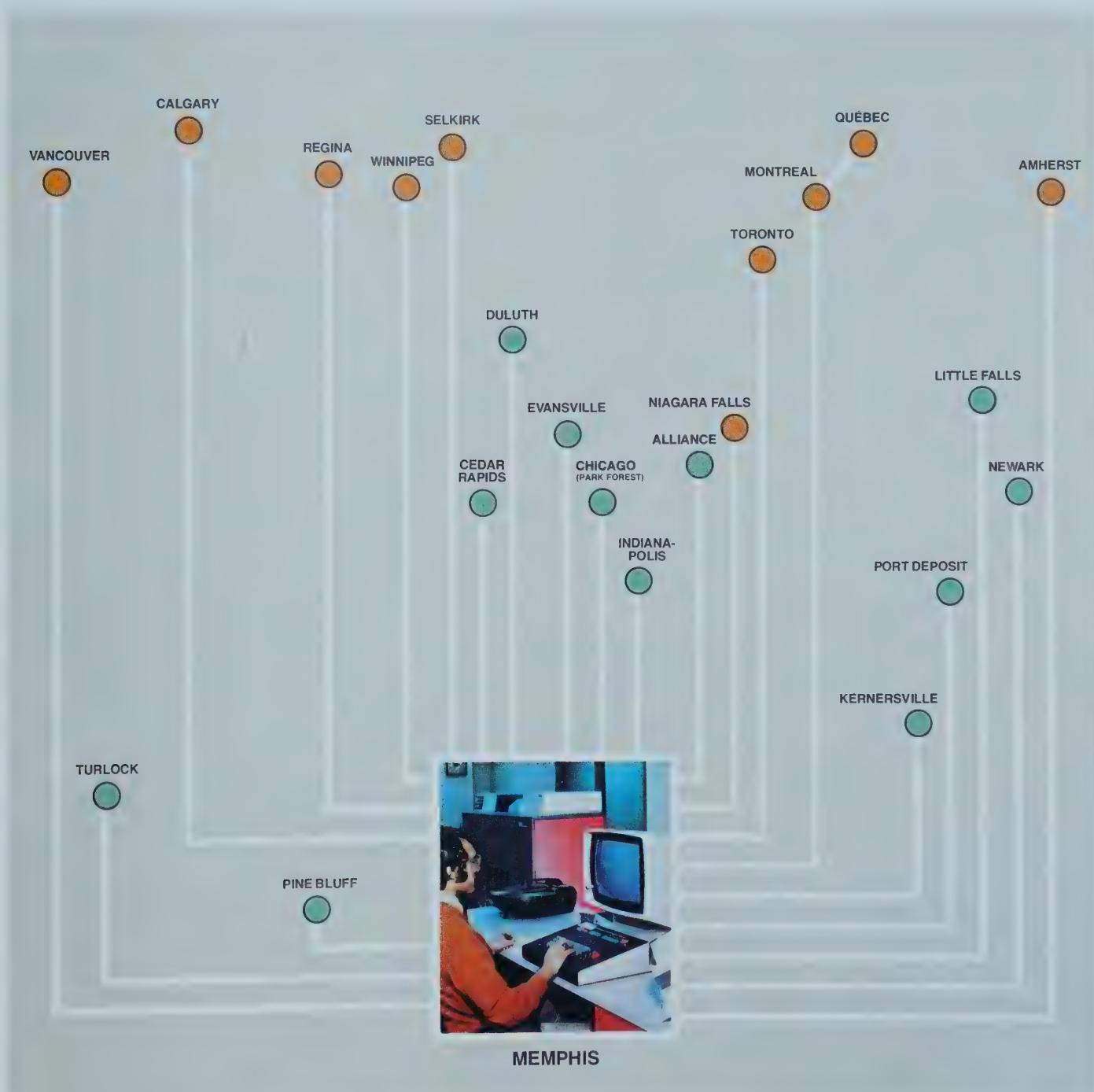
The corporate computer network of Dominion Bridge and AMCA is one of the most advanced in North America. Terminal operators in almost all divisions can tap our central computer in Memphis, Tennessee as speedily as if it were in their own building. Data is instantly available 24 hours a day throughout the week and on an as-needed basis on weekends. It is also possible for several divisions to have simultaneous access to the central computer.

The service is extremely useful in preparing accurate job estimates and in resolving challenges in design,

engineering and manufacturing. It also helps enormously in cost control.

Customers benefit through projects that are accurately designed and manufactured and through the lower costs made possible by this system.

In keeping with the company's exceptional rate of growth in recent years, our computer facilities have been steadily upgraded. As we become more involved in larger and more technological assignments these computer services will continue to expand.



## Manufacturing Services

84



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86



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89



84. Assembly line for the new Mighty Mite gasoline chain saws. Approximately 150 parts are assembled in this line to make up each unit.

85. This new electronic analyser checks each chain saw power unit for friction, compression, pressure, vacuum, ignition, timing and voltage output.

86. Cherry-Burrell maintains complete laboratory facilities for performing product tests and evaluations. These testing facilities are available to customers.

87. The efficient manufacture of metal buildings requires special automatic welding production machinery. This component was designed for the Varco-Pruden plant in Turlock, California.

88. An automatic joist production line designed by corporate Manufacturing Services at Dominion Bridge, Winnipeg.

89. M-M safety grating is a unique Dominion Bridge product. Special machinery was designed by the company to produce it in the Toronto plant.



G. A. Law  
President, Span Holdings Limited

Span Holdings Limited, from its corporate offices in Nassau, Bahamas, manages a variety of international investments and activities.

Span International Limited, also based in the Bahamas, is a company in which Span Holdings holds a 60% interest, the 40% minority interest being held by a consortium of major Canadian and British banks.

Span International, either directly or through its own subsidiary companies, has offices in Brussels, Belgium; Athens, Greece; Boras, Sweden; Hamilton, Bermuda; Manila, Philippine Islands; Manama, Bahrein; and has representation in cities in most countries in the world.

Span International purchases from worldwide sources raw steel and other materials for re-sale in North America and all parts of the world where it has established markets.

The company owns or has under license rights to market a variety of the products of AMCA International Corporation throughout the world, excluding North America.

Among these products are Varco-Pruden pre-engineered metal buildings, Clyde Whirley cranes, ship deck machinery, hoists, derricks and barges. These activities have been highly successful and continue to grow at a very satisfactory rate.

Over the years Span International has developed considerable in-house expertise through its well established professional contacts across the world. It is now able to provide Dominion Bridge and AMCA International with consulting services in international marketing; market surveys; freight insurance and shipping services as well as short and long term financing for export projects.



90



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90. P. G. Wassitsch, Span Vice President — South America photographed in Caracas.

91. G. A. Law, President, (centre) with D. E. Walsh, Vice President, Finance, (left) and J. W. West, Manager of Contracts and Customer Services, discuss project in Span offices in Nassau.

92. F. deGraff, Span Vice President — Raw Materials, (right) with E. S. Berry in the Brussels offices of Span International (Brussels) S.A./N.V.

93. Nassau headquarters in-house design and engineering facilities.

94. R. M. John Wallis, Span Regional Manager for Europe, in London.

## Executive Committee

(as of June 29, 1977)



From the front and then right to left:

K. S. Barclay  
Chairman and Chief Executive Officer

J. Angus Ogilvy, Q.C.  
Senior Vice President  
Dominion Bridge Company, Limited  
Senior Partner: Ogilvy, Montgomery, Renault,  
Clarke, Kirkpatrick, Hannon & Howard

Herbert H. Lank  
Honorary Director  
Du Pont of Canada Limited

W. J. Stenason  
Executive Vice President  
Canadian Pacific Investments Limited

D. S. Holbrook  
Chairman  
The Algoma Steel Corporation, Limited

John Macnamara  
President and Chief Executive Officer  
The Algoma Steel Corporation, Limited

# Directors, Corporate Officers and Corporate Offices

## Directors

\*K. S. Barclay  
Chairman and Chief Executive Officer  
Dominion Bridge Company, Limited

R. E. Chamberlain  
Senior Vice President  
Dominion Bridge Company, Limited

A. J. E. Child  
President and Chief Executive Officer  
Burns Foods Limited

R. J. A. Fricker  
Vice Chairman  
Dominion Bridge Company, Limited

J. Hatcher  
President and Chief Operating Officer  
Dominion Bridge Company, Limited

\*Herbert H. Lank  
Honorary Director  
Du Pont of Canada Limited

\*John Macnamara  
President and Chief Executive Officer  
The Algoma Steel Corporation, Limited

Brian R. B. Magee  
Chairman and Managing Director  
A. E. LePage Limited

MacKenzie McMurray  
Retired Chairman  
Dominion Bridge Company, Limited

\*J. Angus Ogilvy, Q.C.  
Senior Vice President  
Dominion Bridge Company, Limited  
Senior Partner:  
Ogilvy, Montgomery, Renault,  
Clarke, Kirkpatrick, Hannon & Howard

J. D. R. Potter  
Group Vice President,  
Finance and Corporate Services  
The Algoma Steel Corporation, Limited

Dalton D. Ruffin  
Senior Vice President  
Wachovia Bank and Trust Company, N.A.

\*W. J. Stenason  
Executive Vice President  
Canadian Pacific Investments Limited

R. A. Utting  
Vice President, Europe  
The Royal Bank of Canada

W. G. Ward  
(Elected July 26, 1977)  
Chairman  
The Algoma Steel Corporation, Limited

## Corporate Officers

### Principal officers

K. S. Barclay,  
Chairman and Chief Executive Officer

R. J. A. Fricker,  
Vice Chairman

J. Hatcher,  
President and Chief Operating Officer

### Senior officers

R. E. Chamberlain,  
Senior Vice President,  
Engineering and Manufacturing

W. R. Holland,  
Senior Vice President,  
Administration

J. A. Ogilvy, Q.C.,  
Senior Vice President

J. B. Phelan,  
Group Vice President,  
Steel Group

C. B. Rouse,  
Group Vice President,  
Industrial Products Group

F. J. Stevenson,  
Senior Vice President,  
Finance

M. J. Ucci,  
Senior Vice President,  
Corporate Marketing

### Other officers

A. B. Bjornsson,  
Vice President,  
Engineering

R. A. C. Henry,  
Secretary

O. C. Ladanyi,  
Vice President and Treasurer

F. H. Roland,  
Vice President and Controller

## Corporate Offices

Dominion Bridge Company, Limited  
1155 Dorchester Blvd. West  
Montreal, Québec, Canada  
H3B 4C7

AMCA International Corporation  
Dartmouth National Bank Building  
Hanover, New Hampshire 03755  
U.S.A.

Span Holdings Limited  
P.O. Box N4893  
Nassau, Bahamas

\*Member of the Executive Committee

# **Supplying and servicing the world**

## **What we make and where**

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### **Corporate offices**

Montreal, Qué., Canada  
Hanover, N. H., U.S.A.  
Nassau, Bahamas

**Heavy industrial machinery;**  
Municipal incineration units;  
Nuclear products;  
Foundry products;  
Turnkey buildings

Calgary, Alta.  
Edmonton, Alta.  
Montreal, Qué.  
Toronto, Ont.  
Winnipeg, Man.

### **Structural steel**

Amherst, N. S.  
Calgary, Alta.  
Edmonton, Alta.  
Montreal, Qué.  
Québec, Qué.  
Regina, Sask.  
Saskatoon, Sask.  
Thompson, Man.  
Toronto, Ont.  
Vancouver, B. C.  
Winnipeg, Man.

### **Steel production**

Selkirk, Man.

### **Steel service centres**

Amherst, N. S.  
Calgary, Alta.  
Edmonton, Alta.  
Halifax, N. S.  
Montreal, Qué.  
Nanaimo, B. C.  
Québec, Qué.  
Regina, Sask.  
Saskatoon, Sask.  
Sault Ste. Marie, Ont.  
Toronto, Ont.  
Vancouver, B. C.  
Winnipeg, Man.

"Whirley" and industrial cranes;  
Heavy materials handling  
equipment; Fabricated steel for  
marine and construction industries

Alliance, Ohio  
Chicago, Ill.  
Duluth, Minn.  
Niagara Falls, Ont.  
Port Deposit, Md.

### **Pre-engineered metal building systems**

Evansville, Wisc.  
Kernersville, N. C.  
Pine Bluff, Ark.  
Turlock, Calif.

### **Hydraulic excavating equipment**

Indianapolis, Ind.

### **Chain saws and power tools**

Chicago (Park Forest), Ill.  
Toronto, Ont.

### **Processing and packaging machinery**

Cedar Rapids, Iowa  
Little Falls, N. Y.

### **International marketer of raw steel and industrial products**

Athens, Greece  
Boras, Sweden  
Brussels, Belgium  
Hamilton, Bermuda  
Manama, Bahrein  
Manila, Philippine Islands  
Nassau, Bahamas



Dominion Bridge Company, Limited